



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/730,515	12/15/2000	Kazuo Kuroda	107156-00033	9005

7590

03/21/2006

ARENT FOX KINTNER PLOTKIN & KAHN PLLC  
Suite 600  
1050 Connecticut Avenue, N.W.  
Washington, DC 20036-5339

EXAMINER
----------

HINDI, NABIL Z

ART UNIT	PAPER NUMBER
----------	--------------

2627

DATE MAILED: 03/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/730,515

Applicant(s)

KURODA ET AL.

Examiner

NABIL Z. HINDI

Art Unit

2656

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 5-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,2,5 and 12-14 is/are allowed.
- 6) ☒ Claim(s) 6-11 and 15-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

Art Unit: 2656

In response to applicant's filing dated March 07, 2006. The following action is taken:

Claims 6-11 and 15-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims recite an unknown terminology in the art. The use of "preliminary tracking error signal" is not known since what constitute a preliminary tracking error signal is not defined. A tracking error signal is a processed signal wherein any processing prior to the tracking signal output can not be defined as a preliminary. Is it a non-processed signal, half processed signal...etc? the claims further includes the limitations "including an influence of the pre-pit information" and "noise component of the pre-pit" does the limitation correspond to the cross over of the tracking signal at the pre-pit information?.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 6-11 and 15-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Miyamoto et al (5805565).

The examiner read on the limitation "preliminary" tracking as merely a tracking error signal. The reference shows an optical reading apparatus comprising: a disk having an

Art Unit: 2656

information writing track, guide track and pre-pit information area (fig 6) elements 84, 85 and 82. A light receiving means 333, 334, and 340, a pre-pit information detection means 941, 41 and 43, a preliminary tracking error signal producing means 15, removing means for removing the influence of the pre-pit information from the tracking error signal, the reference in fig 4 shows the use of detecting the pre-pit and calculating an influence "tracking offset" to be removed by a comparator 942 and thus producing a tracking error signal. The limitation "phase difference" in claim 18 correspond to the shown teaching of the pre-pit information 831, 832 of fig 2; 833 and 834 of fig 6 wherein the phase and location of the pre-pit do not overlap with respect to the neighboring tracks.

With respect to the limitations of claims 7 and 10. The use of a Quad photo detector is notoriously well established in the art as shown by elements 333, 334 and 340.

With respect to the limitations of claims 8 and 11. The reference in fig 4 shows the use of a noise component "tracking offset" corresponding the pre-pit information which is removed (added to the tracking error signal) by element 942.

With respect to the limitations of claim 15 and 16. The limitation "noise component" correspond to the cited teaching "tracking offset" based on the pre-pit information as shown in fig 4.

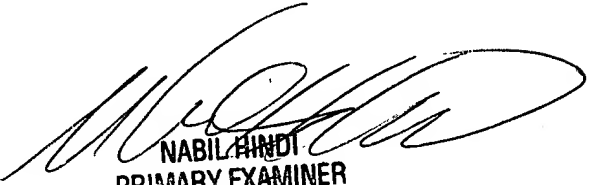
Claims 1, 2, 5, and 12-14 are allowed.

Art Unit: 2656

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. **JP 6-168471. The reference discloses removing the pre-pit influence in the tracking error signal.**

Applicant's arguments with respect to claims 6-11 and 15-18 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication should be directed to NABIL Z. HINDI at telephone number (571) 272-7618.



NABIL HINDI  
PRIMARY EXAMINER  
GROUP 2500